

Electrodynamic Modelling as Scientific Research Method  
of Power Engineering Problems

30-58-4-2/44

high-voltage switch-board, where the wanted scheme is assembled. The common scheme contains a model for the transmission of d.c. which was developed and constructed by the Laboratory of the Leningrad Institute for Power Engineering of the AS USSR. The control of all model elements as well as the measuring and registering of all the processes is carried out in the control room (fig.4) where there are also the automation apparatus. The preparation of an electrodynamic model for the solution of a special task is composed of two parts: first the model elements are adjusted after the given parameters and characteristics or, respectively their variation-range, second the complicated system is formed of the single components. The method of the electrodynamic mould allows to find solutions for any part of the complicated system. These solutions are registered by oscillographic recording (fig.5). Complicated energetic problems can best be solved by the use of modelling and the modern mathematical technique together. The latter is used at the Institute for Electrical Engineering of the AS Ukrainian SSR, at the Laboratory for Control-Apparatus and -Systems of the AS USSR, at the Leningrad Polytechnical Institute, and others.

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*Kostenko, M.P.*

**AUTHORS:**

Alekseyev, A. Ye., Atabekov, G. I.,  
Bron, O. B., Gorodskiy, D. A., Kostenko, M. P., Kurenev, S. I.,  
Neyman, L. R., Polivanov, K. M., Reyngol'dt, Yu. A., Romanov-  
skiy, V. B.

105-58-6-29/33

**TITLE:**

Professor A.Ye. Kaplyanskiy (Professor A.Ye. Kaplyanskiy)

**PERIODICAL:**

Elektrichestvo, 1958, Nr 6, pp. 92-92 (USSR)

**ABSTRACT:**

On the occasion of his 60-th birthday. He was born on May 27, 1898. In 1925 Aleksandr Yevseyevich Kaplyanskiy, Doctor of Technical Sciences, Professor of the Leningrad Military-Air-Engineering Academy graduated from the Leningrad Institute for Electrical Engineering with a gold medal, then he worked in the factory "Krasnaya nit' " and later, until 1932, in the factory "Elektrosila". He planned and constructed the new system for the electric supply of the factory and a number of test stations, among them stations for asynchronous motors and turbogenerators up to 100 MW. In 1925 he began his pedagogical activity in the field of theoretical electrical engineering at the Leningrad Institute for Electrical Engineering. Later he also taught at the Institute for Electrical Engineering for Telecommunication En-

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AUTHORS: Mikhaylov, M. M., Kostenko, M. P., SOV/05-58-7-28/32  
Neyman, L. R., Tareyev, B. M., Privezentsev, V. A., Zaytsev, I. A.,  
Shramkov, Ye. G., Koritskiy, Yu. V.

TITLE: Professor V.T.Renne (Professor V.T. Renne). To His 50<sup>th</sup> Birthday  
(K 50-letiyu so dnya rozhdeniya)

PERIODICAL: Elektrichestvo, 1958, Nr 7, pp. 92 - 92 (USSR)

ABSTRACT: Vladimir Tikhonovich Renne was born on July 1<sup>st</sup>, 1908, in Kaluga. He graduated in 1930 from the Leningrad Polytechnical Institute and obtained the certificate of electrical engineer. Still a student, in 1928 he entered the telephone works "Krasnaya Zarya" and specialized in the field of electric technology. He organized a series of laboratories and directed them during several years. He worked out 15 types of paper-and mica condensers, thus industry being made independent of imports from abroad. He developed a series of cuprous oxide rectifiers for telephone equipment. He holds 8 patents. Since 1930 he teaches at the Leningrad Institute of Electromechanics (Leningradskiy elektromekhanicheskiy institut) and then at the Leningrad Institute of Electrical Engineering (Leningradskiy elektrotekhnicheskiy institut). From 1935 onwards he works at the Leningrad Polytechnical Institute (Leningradskiy

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Professor V.T.Renne. To His 50<sup>th</sup> Birthday

SOV/ 105-58-7-28/32

politekhnikheskiy institut) department of electric insulation and cable engineering, where he has a full-time job since 1939. He organized a laboratory for electric technology and electric condensers and published several manuals. In 1938 - Docent, in 1939 - Candidate of Technical Sciences, in 1951 - Doctor of Technical Sciences, in 1952 - Professor. He published more than 140 papers on electric insulation, electric technology, and condenser design. He maintains close relations with industry and scientific research institutes. He advises them and carries out scientific work together with them. For a number of years he was secretary in the Section of Electric Insulation at the VNITOE and is at present Member of the Bureau of Electric Insulation at the Ts-ENTOEP. He is the scientific head of the Scientific Society of Students at the Faculty of Electromechanics of the Leningrad Polytechnical Institute (LPI). There is 1 photograph.

1. Electrical engineering--USSR

Card 2/2

KOSTENKO, M.P.; ALEKSEYEV, A.Ye.; LYUTER, R.A.; ZAVALISHIN, D.A.; GHEIDIN,  
L.P.; BRITSIN, M.L.

Leonid Nikolaevich Grusov; obituary. Elektrichestvo no.7:93 J1 '58.  
(Grusov, Leonid Nikolaevich, 1906-1957)(MIRA 11:8)

KOSTENKO, M. P.

BOBROV, V.M.; VORONOV, A.A.; GLEBOV, I.A.; IVANOV, V.I.; KARPOV, G.V.;  
KASHTELYAN, V.Ye.; SEMENOV, V.V.; SIROTKO, V.K.; SIRYY, N.S.;  
SUKHANOV, L.A.; URUSOV, I.D.; FETISOV, V.V.; POMINA, Ye.N.;  
KOSTENKO, M.P., akademik, red.; DOLMATOV, P.S., red.izd-va;  
SMIRNOVA, A.V., tekhn.red.

[Electrodynamic modeling of power engineering systems] Elektro-  
dinamicheskoe modelirovanie energeticheskikh sistem. Pod red.  
M.P.Kostenko. Moskva, 1959. 406 p. (MIRA 13:2)

1. Akademiya nauk SSSR. Institut elektromekhaniki.  
(Electric networks--Electromechanical analogies)

KAZOVSKIY, Ye.Ya. (Leningrad); KOSTENKO, M.P. (Leningrad)

Present day methods for the investigation of transitional processes  
in a.c. electric machines. Izv. AN SSSR. Otd.tekh.nauk. Energ. i  
avtom. no.4:11-22 JI-Ag '59. (MIRA 12:11)  
(Electric machines)

8(0), 28(1)

SOV/30-59-7-4/50

AUTHOR:

Kostenko, M. P., Academician

TITLE:

Comprehensive Research Program in the Field of Electromechanics  
(Bol'shaya programma issledovaniy po elektromekhanike)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1959, Nr 7, pp 27-33 (USSR)

ABSTRACT:

The Institut elektromekhaniki Akademii nauk SSSR (Institute of Electromechanics of the Academy of Sciences of the USSR) is equipped with modern facilitations for conducting investigations in connection with the further development of power engineering by means of models. At present it is mainly planned to establish heat-generating stations which will again involve new problems. The institute carries out its work in collaboration with works for the construction of electric machinery, design organizations, and the Vsesoyuznyy elektrotekhnicheskiy institut im. V. I. Lenina (All-Union Institute for Electrotechnology imeni V. I. Lenin). The investigations of the common work with regard to gigantic transmissions of DC and AC shall be carried out by means of the electrodynamic model of the Institute of Electromechanics as well as by the use of the model for the transmission of DC of the leningradskaya laboratoriya Energeticheskogo

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Comprehensive Research Program in the Field of Electromechanics

instituta im. G. M. Krzhizhanovskogo (Leningrad Laboratory of the Institute of Power Engineering imeni G. M. Krzhizhanovskiy). Problems in the field of relay protection of energy systems can be solved by using semiconductor elements. In connection with the future development of uniform energy systems in the European part of the USSR and Central Siberia as well as with the connected energy systems of the Northwest and West of Transcaucasia, Kazakhstan, and (Soviet) Central Asia, the development of control methods for these energy systems is of great importance. Remote control is frequently applied in power engineering. The Institute of Electromechanics is working out new measuring devices for automatic control systems, for the production of which contactless magnetic elements, ferrites, transistors, and semiconductor diodes are used. Investigations in the field of remote measurements have already been started. For the purpose of developing the theory and technology of automatic control, the so-called self-adjusting systems are continuously gaining importance. The group for electric welding equipment of the Institute of Electromechanics is going to carry out investigations within the Seven-year Plan in the field of mechanization and ✓

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Comprehensive Research Program in the Field of Electromechanics

automation of contact machines for electric welding. The Institute is also working at the development of systems for the automatic control of astronomical instruments as well as at the solution of problems connected with the electrification of railroads. ✓

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8 (0)

AUTHORS:

Kostenko, M. P., Kulebakin, V. S., SOV/105-59-11-27/32  
Traneznikov, V. A., Venikov, V. A., Goloban, A. T., Morozov, D. P.,  
Syromyatnikov, I. A. Drozdov, N. G., Petrov, I. I., Basharin,  
A. V., Sokolov, M. N., and others

TITLE:

Professor M. G. Chilikin. On His 50th Birthday and His 25th  
 Year of Scientific, Engineering, and Pedagogical Activity

PERIODICAL:

Elektrichestvo, 1959, Nr 11, p 91 (USSR)

ABSTRACT:

Professor Mikhail Grigor'yevich Chilikin is Director of the  
 Moskovskiy ordena Lenina energeticheskiy Institut (Moscow Order  
 of Lenin Institute of Power Engineering) and a specialist in  
 the field of electric drive. Professor M. G. Chilikin wrote  
 his dissertation for his application as Candidate of Technical  
 Sciences in 1938, in 1951 he was appointed professor and in  
 1954 he obtained the degree of a Doctor of Technical  
 Sciences. Since 1951 he has taught at the Kafedra "Elektro-  
 oborudovaniye promyshlennykh predpriyatiy" (Chair for  
 Electrical Equipment of Industrial Enterprises) of MEI. He hold  
 lectures on electric drives and dealt with the construction of  
 electric drive systems. In 1952 he became head of the afore-  
 mentioned institute. He issued ninety papers on teaching ✓

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KOSTENKO, M.P., akademik, otv.red.; SOROKIN, I.P., red.izd-va;  
DOROKHINA, I.N., tekhn.red.

[Electrification of railroads with stepped-up a.c. of commercial frequency; papers submitted to the conference on science and technology] Elektrifikatsiia transporta na peremennom toke promyshlennoi chastoty povyshennogo napriazheniia; trudy nauchno-tekhnicheskoi konferentsii. Moskva, 1960. 135 p.

(MIRA 14:2)

1. Akademiya nauk SSSR. Institut kompleksnykh transportnykh problem.

(Railroads--Electrification)

KOSTENKO, M. P., MEYMAN, L. R., SOVALOV, S. A., SOKOLOV, N. I., VENIKOV, V. A.,  
GERTSENBERG, Grigoriy R.,

"Excitation control of synchronous machines in power systems of the Soviet Union"

report to be submitted for Intl. Conference on Large Electric Systems (CIGRE),  
18th Biennial Session, Paris, France, 15-25 Jun 60.

KAZOVSKIY, Ye. Ya. (Leningrad); KOSTENKO, M. P. (Leningrad); PAN' TSZI (Leningrad);  
SE GO-LYAN, (Leningrad)

Use of new methods in the experimental study of parameters of a  
synchronous machine. Izv. AN SSSR. Otd. tekhn. nauk. Energ. i avtom.  
no. 4:3-16 J1-Ag '60. (MIRA 13:8)  
(Electric machinery, Synchronous)

KAZOVSKIY, Ye.Ya.(Leningrad); KOSTENKO, M.P.(Leningrad); SE GO LYA  
[Hsieh Kuo-liang] (Leningrad)

Experimental study of electromagnetic parameters of a synchronous  
machine with two phases of the stator winding fed with d.c.  
current. Izv.AN SSSR. Otd.tekh.nauk. Energ. i avtom. no.5:28-32  
S-O '60. (MIRA 13:11)

(Electric machinery, Synchronous)



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S/105/60/000/05/25/028  
B007/B008

AUTHORS: Andrianov, V.N., Astakhov, N.V., Gubenko, T.P., Kostenko, M.P.,  
Larionov, A.N., Lopukhina, Ye.M., Petrov, G.N., Somikhina, G.S.,  
Yuferov, F.M., Chilikin, M.G.

TITLE: Yu.S. Chechet, (Deceased)

PERIODICAL: Elektrichestvo, 1960, No. 5, p. 89


TEXT: Yuriy Sergeyevich Chechet, Professor at the Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering), scientist and pedagogue, and an expert in the field of electrical micromachines, died on February 26, 1960. He was born on February 2, 1894. He studied at the mekhanicheskiy fakul'tet Kiyevskogo politekhnicheskogo instituta (Department of Mechanics at the Kiev Polytechnic Institute) from 1913 to 1919. From 1919 teaching activity in Odessa and in Moscow. In 1923 he graduated from the elektrotekhnicheskiy fakul'tet Moskovskogo vysshego tekhnicheskogo uchilishoha (Department of Electrical Engineering at the Moscow Higher Technical School). He published about 40 scientific studies. From 1931-1942 Director of the kafedra elektricheskikh mashin (Chair for Electrical Machines) at the Moskovskiy institut

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Yu.S. Chechet (Deceased)

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mekhanizatsii i elektrifikatsii sel'skogo khozyaystva (Moscow Institute of the Mechanization and Electrification of Agriculture). From 1942 until his death he was Professor at the kafedra elektricheskikh mashin Moskovskogo energeticheskogo instituta (Chair for Electrical Machines at the Moscow Institute of Power Engineering). At the same time he directed a chair at the Voenno-inzhenernaya Krasnoznamennaya akademiya im. Kuybysheva (Military "Red Banner" Engineering Academy imeni Kuybyshev) for a number of years. He took his doctor's degree in 1940. He wrote his dissertation on "Theoretical Principles for the Designing of Universal Micromotors" ("Teoreticheskiye osnovy proyektirovaniya universal'nykh mikrovdigateley."). He was a Deputy of the Mossovet (Moscow Soviet of Workers' Deputies) and holder of the Order of Lenin and a number of medals, as well as Chairman of the Section Electrical Machines of the MONITOE. There is 1 figure.



Card 2/2

KOSTENKO, M.P. (Leningrad)

Production of large electric machinery and transformers is the basis  
for the development of electric power and electrification. Izv. AN  
SSSR. Otd. tekhn. nauk. Energ. i avtom. no.6:10-14 N-D '60.

(MIRA 13:12)

(Electric machinery) (Electric power)

KOSTENKO, M.P., akademik; KAZOVSKIY, Ye.Ya., kand.tekhn.nauk;  
DANILEVICH, Ya.B., inzh.

Experimental study of new methods for determining the  
parameters of a.c. machines. Elektrichestvo no.6:14-16  
Je '60. (MIRA 13:7)

1. Institut elektromekhaniki AN SSSR.  
(Electric machinery—Alternating current)

KAZOVSKIY, Ye.Ya. (Leningrad), KOSTENKO, M.P. (Leningrad), PAN' TSZI  
[P'an Chi] (Leningrad)

Use of new methods for the experimental determination of the electromagnetic parameters of an asynchronous machine. Inv. AN SSSR.  
Otd. tekhn. nauk. Energ. i avtom. no.6:86-91 N-D '60. (MIRA 13:12)  
(Electric motors, Induction)

KOSTENKO, M.P.

Vatslav Aleksandrovich Tolvinskii. Trudy LPI no. 209:5-10  
'60. (MIRA 14:2)  
(Tolvinskii, Vatslav Aleksandrovich, 1887-1952)

VENIKOV, V.A., doktor tekhn.nauk; GERTSENBERG, G.R., kand.tekhn.nauk;  
KOSTENKO, M.P., akademik; NEYMAN, L.R.; SOVALOV, S.A., kand.tekhn.  
nauk; SOKOLOV, N.I., kand.tekh.nauk

Strong regulation in electric systems. Elek.sta. 31 no.6:43-49  
Ja '60. (MIRA 13:7)

1. AN SSSR (for Kostenko). 2. Chlen-korrespondent AN SSSR (for  
Neyman).  
(Electric power distribution)  
(Voltage regulators)

KOSTENKO, M.P., akad., red.; ALEKSEYEVA, A.Ye., red.; DENISOV, G.A., red.  
izd-va; ZAMARAYEVA, R.A., tekhn. red.

[Problems of modern rolling stock of electric railroads] Voprosy sovremennogo elektropodvizhnogo sostava. Moskva, Izd-vo Akad. nauk SSSR, 1961. 191 p. (MIRA 14:11)

1. Akademiya nauk SSSR. Institut elektromekhaniki. 2. Chlen-korrespondent AN SSSR (for Alekseyeva)  
(Electric locomotives) (Diesel locomotives)



KOSTENKO, M.P.; URUSOV, I.D.

Research on the manufacture of heavy electric machinery. Sbor.  
rab. po vop. elektromekh. no.6:187-200 '61. (MIRA 14:9)  
(Electric machinery)

KOSTENKO, M.P., akademik; LADSOV, I.D.

Scientific problems in the large-scale manufacture of electric  
equipment. Vest. AN SSSR 31 no. 2:37-43 F '61. (MIRA 14:2)  
(Electric machinery industry)

SISAKYAN, N.M., akademik; MINTS, I.I., akademik; SATPAYEV, K.I., akademik;  
FRUMKIN, A.N., akademik; SHEMYAKIN, M.M., akademik; SOBOLEV, S.L.,  
akademik; SHULEYKIN, V.V., akademik; BITSADZE, A.V.; MEL'NIKOV, N.V.;  
KHOVSTOV, V.M.; ROMASHKIN, P.S.; ABDULLAYEV, Kh.M.; DADYKIN, V.P.,  
doktor biol.nauk; OBOLENTSEV, R.D., doktor khim.nauk; PONOMAREV,  
B.N.; BLAGONRAVOV, A.A., akademik; ARTSIMOVICH, L.A., akademik;  
KOSTENKO, M.P., akademik; NALIVKIN, D.V., akademik

Discussion of the report. Vest.AN SSSR 31 no.3:27-47 Mr '61.  
(MIRA 14:3)

1. AN Kazakhskoy SSSR (for Satpayev). 2. Chleny-korrespondenty  
AN SSSR (for Bitsadze, Mel'nikov, Khvostov, Romashkin, Abdullayev,  
Ponomarev).

(Research)

KOSTENKO, M.P., akademik

Twenty-fifth anniversary of the founding of the Indian National  
Institute of Sciences. Vest.AN SSSR 31 no.6:81-82 Je '61.  
(MIRA 14:6)

(India—Learned institutions and societies)

KOSTENKO, M.P., KAZOVSKIY, YE.YA., KARPOV, G.V..

"Determination of large hydro-generator constants."

Report to be submitted for the 19th Biennial Session, Intl. Conf. on  
Large Electric Systems(CIGRE), Paris, France, 16-26 May '62.

All Scientists Are members of the Inst. of Electromechanics, AS USSR.

KOSTENKO, M.P., AKOPYAN, A.A., LEVINSHTEYN, M. L., LYSKOV, YU.I. ROKOTYAN, S. S.,  
FOTIN, V.P., SHUR, S.S.

"E.H.V. line internal overvoltages and measures for their limiting."

Report to be submitted for the 19th Biennial Session, Intl. Conference  
on large electric systems (cigre), Paris, France, 16-26 May '62.

AKOPYAN, All-Union Elect. Engineering Inst. im V.I. Lenin, Moscow  
KOSTENKO, AS, USSR, Inst. Electromechanics  
LEVINSHTEYN, Leningrad Polytechnical Inst. im M.I. Kalinin  
LYSKOV, All-Union Scientific Research Planning Inst. Thermoelectric Indust.  
ROKOTYAN, Dept. Long Distance Power Transmission, All-Union Inst. Planning  
Steam-Electric Stations, Substations and Furnaces  
FOTIN, All-Union Elect. Engineering Inst. im V.I. Lenin, Moscow  
SHUR, Scientific Research Inst. of Direct Current, Leningrad

KAZOVSKIY, Yefim Yakovlevich; KOSTENKO, M.P., akademik, otv. red.;  
BARKOVSKIY, I.V., red. izd-va; VINOGRADOVA, N.F., tekhn.  
red.

[Transient processes in a.c. machinery] Perekhodnye protsessy  
v elektricheskikh mashinakh peremennogo toka. Moskva, Izd-vo  
Akad. nauk SSSR, 1962. 624 p. (MIRA 15:4)  
(Electric machinery—Alternating current)  
(Transients (Electricity))

KOSTENKO, M.P.; SIUNOV, N.S.; KAZOVSKIY, Ye.Ya.; MIKLYAYEV, M.S.

Use of a frequency method for determining the starting characteristics of synchronous motors. Izv. AN SSSR. Otd. tekhn. nauk. Energ. i avtom. no.1:63-69 Ja-F '62. (MIRA 15:3)  
(Electric motors, Synchronous)



SYROMYATNIKOV, I.A.; NEKRASOV, A.M.; LEBEDEV, A.A.; KOSTENKO, M.P.;  
NEYMAN, L.R.; VASIL'YEV, D.V.; KAMENSKIY, M.D.; USOV, S.V.;  
POSSE, A.V.; UL'YANOV, S.A.; FAZYLOV, Kh.F.

Professor N.N. Shchedrin; on his seventieth birthday and fortieth  
anniversary of his educational work. Elektrichestvo no.1:94-  
95 Ja '62. (MIRA 14:12)

(Shchedrin, Nikolai Nikolaevich, 1891-)

KOSTENKO, M.P.

The leading role of electrification in the technological progress  
of the U.S.S.R. and problems of science. Izv.AN SSSR.Otd.tekh.  
nauk.Energ.i avtom. no.2:3-8 Mr-Apr '62. (MIRA 15:4)  
(Electrification)

GNEDIN, L.P. (Leningrad); KOSTENKO, M.P. (Leningrad)

Modification of induction system schematics of synchronous  
transmission. Izv. AN SSSR. Otd. tekhn. nauk. Energ. i avtom.  
no.4:24-31 J1-Ag '62. (MIRA 15:8)  
(Servomechanisms)

KOSTENKO, M.P., akademik; MAMIKONYANTS, L.G., prof.; SYROMYATNIKOV, I.A., prof.

Session of Committee No.17 (Generators) of the International  
Conference on Large Electric Systems (CIGRE). Elektrichestvo  
no.6:86-89 Je '62. (MIRA 15:6)  
(Turbogenerators—Congresses)  
(Electric power plants—Congresses)

BESSONOV, L.A.; DOMANSKIY, B.I.; DROZDOV, N.G.; D'YACHENKO, N.Kh.;  
ZHEKULIN, L.A.; ZAYTSEV, I.A.; ZALESSKIY, A.M.; KAMENSKIY, M.D.;  
KOSTENKO, M.P.; LEBEDEV, A.A.; LOMONOSOV, V.Yu.; MITKEVICH, A.V.;  
SMIRNOV, V.S.; TOLSTOV, Yu.G.; USOV, S.V.; SHRAMKOV, Ye.G.

L.R. Neiman; on his 60th birthday and the 35th anniversary of  
his educational work. Elektrichestvo no.6:93-94 Je '62. (MIRA 15:6)  
(Neiman, Leonid Robertovich, 1902-)

KOSTENKO, M.P., akademik; NEYMAN, L.R.; GLINTERNIK, S.R., kand.tekhn.  
nauk; KASHTEL'YAN, V.Ye., inzh.; NOVITSKIY, V.G., inzh.; SIRYY,  
N.S., inzh.; GERTSENBERG, G.R., kand.tekhn.nauk

Automatic control and stability during parallel operation of  
the generators of an electric power plant feeding a.c. and d.c.  
power transmission lines. Elektrichestvo no.10:1-9 0 '62.

(MIRA 15:12)

1. Institut elektromekhaniki AN SSSR (for Kostenko, Neyman,  
Glinternik, Kashtelyan, Novitskiy, Siryy). 2. Vsesoyuznyy  
elektrotekhnicheskiy institut (for Gertsenberg). 3. Chlen-  
korrespondent AN SSSR (for Neyman).

(Electric power distribution)

KOSTENKO, M.P., akademik (Leningrad); KAZOVSKIY, Ye.Ya., doktor tekhn. nauk  
(Leningrad); VOLKOV, A.M., inzh. (Leningrad); PAN' TSZI, [P'an Chi],  
inzh. (Leningrad)

Methodology for determining the frequency characteristics of an a.c.  
machine. Elektrichestvo no.12:1-7 D '62. (MIRA 15:12)  
(Electric machinery—Alternating current)

ZALESSKIY, A.M.; ZILITINKEVICH, S.I.; KOSTENKO, M.P.; NEYMAN, L.R.

Vladimir Fedorovich Mitkevich; on the occasion of the 90th anniversary of his birth. Izv.vys.ucheb.zav.; prib. 5 no.4: 123-124 '62. (MIRA 15:9)  
(Mitkevich, Vladimir Fedorovich, 1872-1951)



SHCHERBAKOV, D.I., akademik; FRUMKIN, A.N., akademik; KHACHATUROV, T.S.;  
VINOGRADOV, A.P., akademik; SOBOLEV, S.L., akademik; KOSTENKO, M.P.,  
akademik; TOLSTOV, S.P.; SAZHIN, N.P.; KAZARNOVSKIY, I.A.; VUL, B.M.;  
TROFIMUK, A.A., akademik

Discussion of the annual report. Vept. AN SSSR 33 no.3:25-34  
Mr '63. (MIRA 16:3)

1. Chleny-korrespondenty AN SSSR (for Khachaturov, Tolstov, Sashin,  
Kazarnovskiy, Vul).

(Academy of Sciences of the U.S.S.R.)

KOSTENKO, M.P., akademik

Development of power engineering and modern science. Vest.  
AN SSSR 33 no.5:20-23 My '63. (MIRA 16:6)

(Power engineering)

KOSTENKO, M.P.; MEIENT'YEV, L.A.; KAMENSKIY, M.D.; ZALESSKIY, A.M.; BRIL',  
R.Ya.; GORSHKOV, A.S.; SAVASHINSKAYA, V.I.; DOVGAL', S.A.; KOVALEV,  
N.N.; BOLOTOV, V.V.; USOV, S.V.; GERASIMOV, V.N.; SIVAKOV, Ye.R.;  
AVRUKH, A.Ya.; STARIKOV, V.G.; MIKHALEVICH, A.I.

I.V. Gofman; obituary. Elek. sta. 34 no.6:95 Je '63. (MIRA 16:9)  
(Gofman, Igor' Valentinovich, 1903-1963)

KOSTENKO, M.P., akademik (Leningrad); DEMBO, A.R., kand. tekhn. nauk  
(Leningrad); PRUSS-ZHUKOVSKIY, V.V., inzh. (Leningrad)

The basis for solving the problem of future locomotives is  
the railway motor. Zhel. dor. transp. 45 no.6:60-65 1963.  
(MIRA 16:7)

(Railroad research)  
(Electric railway motors)

KOSTENKO, M.P. (Leningrad)

Pressing problems in the electrification of means of transportation. Izv. AN SSSR. Energ. i transp. no.5:599-604  
S-0 '63. (MIRA 16:11)

IVANOV, N. P.; KOSTENKO, M. P.; KAZOVSKIY, E. I.; STANISLAVSKIY, L. I.; POTEKHIN, K. F. 5

"Large Modern Highly Utilized Turbine and Waterwheel Generators, Their Cooling Systems, Characteristics and Parameters."

Large

report submitted for Intl Conf on/Electric Systems, 20th Biennial Session, Paris,  
1-10 Jun 64.

KOSTENKO, Mikhail Polivayktovich, akademik; PICTROVSKIY, Lyudvik  
Mar'yanovich; CHECHET, Yu.S., prof., retsenzent;  
USSER, A.S. kand. tekhn. nauk, red. VOL'DEK, A.I.,  
doktor tekhn. nauk, red.; FRUSS-ZHUKOVSKIY, V.V., nauchn.  
red.; ALEKSEYEVA, Ye.A., red.

[Electrical machinery] Elektricheskie mashiny. Izd.2.,  
Moskva, Energiia. Pt.1. 1964. 547 p. (MIRA 18:1)

KOSTENKO, M. P., akademik

Work of the Institute of Electromechanics in the field of  
large electric machinery manufacture. Elektrotehnika 35  
no.1:16-18 Ja '64. (MIRA 17:2)

1. Direktor Instituta elektromekhaniki AN SSSR.



KOSTENKO, M.P., akademik

Scientific engineering problems in the field of electric power  
engineering: Vest. AN SSSR 34 no.11:20-27 N '64.

(MIRA 17:12)

KOSTENKO, Mikhail Poliyevktovich; PIOTROVSKIY, Lyudvik  
Marianovich; ANEMPODISTOV, V.P., nauchn. red.; ALEKSEYEVA,  
Ye.A., red.

[Electrical machines] Elektricheskie mashiny. Moskva,  
Energia. Pt.2. 1965. 703 p. (MIRA 18:11)

SMIRNOV, V.S.; KOSTENKO, M.P.; NEYMAN, L.R.; KOSTENKO, M.V.; DOMANSKIY,  
B.I.; ZALESSKIY, A.M.; USOV, S.V.; AYZENBERG, B.L.; DUBINSKIY,  
L.A.; ALEKSANDROV, G.N.; GRIBOV, A.N.; GRUZDEV, I.A.; LEVINSHTEYN,  
M.L.; MIKIRTICHEV, A.A.; MIKHAYLOVA, V.I.; RUZIN, Ya.L.; STEFANOV,  
K.S.; KHOBERG, V.A.; SHCHERBACHEV, O.V.

M.D. Kamenskii; on his 80th birthday. Izv. vys. ucheb. zav.;  
energ. 8 no.7:130-131 J1 '65. (MIRA 18:9)

ALEKSENKO, G.V.; BIRYUKOV, V.G.; BORISENKO, N.I.; BORUSHKO, V.S.; KOVALEV, N.M.;  
KOSTENKO, M.P.; OBOLENSKIY, N.A.; PETROV, G.N.; ROZANOV, A.A.;  
SKIDANENKO, I.T.; TIMOFEYEV, P.V.; CHILIKIN, M.G.; SHERMET'YEVSKIY, N.N.

Professor Andronik Gavondovich Iosif<sup>ian</sup>, 1905- ; on his 60th  
birthday. Elektrichestvo no.9:88 S '65.

(MIRA 18:10)

KOSTENKO, M.P., akademik; GNEDIN, L.P., doktor tekhn. nauk

. Electrical machines with low power rating. Elektrotekhnika 36  
no.8:1-3 Ag '65. (MIRA 18:9)

KOSTENKO, M.P., akademik; LYUTER, R.A., doktor tekhn.nauk; KAZOVSKIY, Ye.Ye.,  
doktor tekhn.nauk, prof.; IVANOV, N.P., kand.tekhn.nauk

Conditions governing the use of nonsynchronous cutting-19  
in electric power systems. Elektrichestvo no.12:77-78 D 65.  
(MIRA 18:12)

ATABEKOV, G.I.; BELOUSOV, M.M.; BULGAKOV, K.V.; VASIL'YEV, D.V.;  
YEGIZAROV, I.V.; ZAKHAROV, S.N.; ZEYLIDZON, Ye.D.; KOSTENKO, M.P.;  
MANOYLOV, V.Ye.; HARNEVSKIY, B.I.; RYZHOV, P.I.; SOLOV'YEV, I.I.;  
SYROMYATNIKOV, I.A.; FABRIKANT, V.L.; CHERNIN, A.B.; CHERNOBROVOV,  
N.V.; FEDOSEYEV, A.M.; SHABADASH, B.I.; SHCHEDRIN, N.N.;  
FATEYEV, A.V.

Viktor Ivanovich Ivanov, 1900-1964; an obituary. Elektrichestvo  
no.11:89 N '64. (MIRA 18:2)

ATABEKOV, G.I.; BASHARIN, A.V.; BOGORODITSKIY, N.P.; BULGAKOV, K.V.;  
VASIL'YEV, D.V.; YEGIAZAROV, I.V.; YERMOLIN, N.P.; KOSTENKO, M.P.;  
MATKHANOV, P.N.; NOVASH, V.I.; NORNEVSKIY, B.I.; RUTSKIY, A.I.;  
RYZHOV, P.I.; SOLOV'YEV, I.I.; SOLODNIKOV, G.S.; SLEPYAN, Ya.Yu.;  
SMUROVA, N.V.; TINYAKOV, V.A.; FATEYEV, A.V.; FEDOSEYEV, A.M.;  
SHABADASH, B.I.; SHCHEDIN, N.N.

Viktor Ivanovich Ivanov, 1900-1964; obituary. Izv. vys. ucheb.  
zav.; energ. 8 no.1:122-123 Ja '65.

(MIRA 18:2)



VOL'DEK, A.I.; DOMANSKIY, B.I.; DRANNIKOV, V.S.; ZALESSKIY, A.M.;  
KAMENSKIY, M.K.; KANTAN, V.V.; KASHKAROV, G.Ye.; KIZEVETTER, Ye.I.;  
KLIMOV, A.N.; KOVALEV, N.N.; KOSTENKO, M.P.; KOSTENKO, M.V.;  
NEYMAN, L.R.; PAVLOV, G.M.; RAVDONIK, V.S.; RUZIN, Ya.L.;  
SIDOROV, M.M.; SHRAMKOV, Ye.G.

Professor Sergei Vasil'evich Usov, 1905- ; on his 60th birthday.  
Elektrichestvo no.11:86 N '65. (MIRA 18:11)

L 22149-66

ACC NR: AP6012968

SOURCE CODE: UR/0143/65/000/007/0130/0131

AUTHOR: Smirnov, V. S.; Kostenko, M. P.; Neyman, L. R.; Kostenko, M. V.;  
Domanskiy, B. I.; Zalesskiy, A. M.; Usov, S. V.; Ayzenberg, B. L.; Dubinskiy, L. A.;  
Aleksandrov, G. N.; Gribov, A. N.; Gruzdev, I. A.; Levinshteyn, M. L.;  
Mikirtichev, A. A.; Mikhaylova, V. I.; Ruzin, Ya. L.; Stefanov, K. S.;  
Khoberg, V. A.; Shcherbachev, O. V.

ORG: none

TITLE: Honoring the 80th birthday of Mikhail Davidovich Kamenskiy

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 7, 1965, 130-131

TOPIC TAGS: electric power engineering, electric engineering personnel,  
hydroelectric power plant, thermoelectric power plant

ABSTRACT: On 19 April 1965 Prof. Dr. Techn. Sci. Mikhail Davidovich Kamenskiy celebrated his 80th birthday and the 55th anniversary of his active work as a power expert. Mikhail Davidovich is a 1909 graduate of the Petersburg Polytechnic Institute - since his graduation he has been associated with this institute, now renamed Leningrad Polytechnic Institute, as an instructor. He is a major scientist and specialist in electric power grids and systems. He has been a major contributor to the establishment of the Leningrad Power Grid and various large thermal and hydro-

Card 1/2

L 22149-66

ACC NR: AP6012968

electric power stations and an active participant in the design and construction of high- and low-voltage power systems in many cities of the Soviet Union. During the Siege of Leningrad in World War II he was a member of the Municipal Party Defense Committee. Since the war Mikhail Davidovich has been head of the Chair of Electric Power Grids and Systems at the Leningrad Polytechnic Institute and has been working on the methods of calculating the economic regimes of power system operation and on the problems of the present-day development of urban power systems. M.D. Kamenskiy has published more than 80 works, including both original studies as well as textbooks that are popular in the Soviet Union and abroad. He is the chairman of the Section on Power Systems and Grids under the Leningrad Division of the Scientific and Technical Division of the Power Industry and organizer of and participant in many scientific-technical conferences and meetings. His merits as an educator of a new school of Soviet power engineers are equally large. Orig. art. has: 1 figure. [JPFS]

SUB CODE: 10 / SUBM DATE: none

Card 2/2 dda

REF ID: A6013617

ACC NR: A6013617

SOURCE CODE: UR/0105/65/COO/011/0086/0026

AUTHOR: Vol'dek, A. I.; Domanskiy, B. I.; Drannikov, V. S.; Zalesskiy, A. M.;  
Kamenskiy, M. K.; Kantan, V. V.; Kashkarov, G. Ye.; Kizevetter, Ye. I.; Klimov, A. N.;  
Kovalev, N. N.; Kostenko, M. P.; Kostenko, M. V.; Neyman, L. R.; Pavlov, G. M.;  
Ravdonik, V. S.; Ruzin, Ya. L.; Sidorov, M. M.; Shramkov, Ye. G.

ORG: none

TITLE: Professor Sergey Vasil'yevich Usov, on his 60th birthday

SOURCE: Elektrichestvo, no. 11, 1965, 86

TOPIC TAGS: academic personnel, electric engineering personnel, electric power plant

ABSTRACT: The noted Soviet power specialist Professor S. V. USOV, who was 60 years old last September, graduated from the Leningradskiy elektrotekhnicheskiy institut (Leningrad Electrotechnical Institute) in 1930 and then, for the next twenty years, worked for the Lenenergo power system of which he became chief engineer in 1939. During the blockade of Leningrad he was head of the group which in 45 days managed to connect the beleaguered city with the Volkhovskaya hydroelectric station across the frozen Ladoga lake. He also carried out the adaptation of the boilers of the Leningrad thermal power plant to consume the locally available fuel. In 1949 he became professor and head of the Department of Electric Stations.

Card 1/2

UDC: 621.311.1

L 22429-66

ACC NR: AP6013617

of the Leningradskiy politekhnicheskoy institut (Leningrad Polytechnic Institute) Im. Kalinin. In addition to his fruitful pedagogical endeavors, he published 50 scientific papers. From 1955 to 1958 he was a deputy director for scientific work. In 1964 he was elected Dean of the Electromechanical Faculty of the Institute. He joined the Party in 1942; from 1943 to 1955 was deputy president of the central board of the NTOEP (Nauchno-tekhnicheskoye obshchestvo energeticheskoy promyshlennosti; Scientific Engineering Society of Power Industries), president of the section of power systems of NTOEP, and member of numerous scientific-engineering councils. For many years he was a member of the editorial board of the journal Elektricheskiye stantsii (Electric Stations). For his contributions in the field of power engineering S. V. USOV was awarded the Order of Lenin, Order of Red Banner of Labor, Order of Red Star, Badge of Distinction, and the medals: "For the Defense of Leningrad" and "For Distinguished Service During the Patriotic War." Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10 / SUM DATE: none

Card 2/2 B L G

L 22739-66 EWP(k)/EWP(h)/ENT(d)/EWP(l)/EWP(v)

ACC NR: AP6013621

SOURCE CODE: UR/0105/65/000/009/0088/0088

AUTHOR: Aleksenko, G. V.; Biryukov, V. G.; Borisenko, N. I.; Borushko, V. S.;  
Kovalev, N. N.; Kostenko, M. P.; Obolenskiy, N. A.; Petrov, G. N.; Rozanov, A. A.;  
Skidanenko, I. T.; Timofeyev, P. V.; Chilikin, M. G.; Sheremet'yevskiy, N. N.

ORG: none

TITLE: Honoring the 60th birthday of Professor Andronik Gevondovich Iosif'yan

SOURCE: Elektrichestvo, no. 9, 1965, 88

TOPIC TAGS: academic personnel, scientific personnel, automation, electric engineering, servosystem, automatic control

ABSTRACT: 21 July 1965 was the 60th birthday of the eminent Soviet scientist in the field of electrical mechanics and automation, Dr. Techn. Sci., Professor, Member of the AS Armenian SSR, Hero of Socialist Labor, Laureate of the State Prize, A. G. Iosif'yan. His scientific contributions are numerous. During 1931-1934 he developed the theory of the combined synchronous control circuit with AC commutator generator. Subsequently, he invented the contactless selsyn. He was the first Soviet scientist to publish studies of thyatron-based servosystems for the control of electrical machinery. During 1940-1945 he made a major contribution to the theory of electrical machinery and automatic control by publishing studies on the general theory of the elec-

UDC: 621.3:65.011.56

Card 1/2

L 22739-66

ACC NR: AP6013621

2  
tromechanical amplifier (amplidyne) and power-driven synchronous servosystems. In his 35 years of scientific activity A. G. Iosif'yan has published more than 60 studies on many problems of electrical mechanics and automatic control and has been the author of 24 inventions. A. G. Iosif'yan is the founder and director of the All-Union Order of Labor Red Banner Scientific Research Institute of Electromechanics, and it was on his initiative that branches of this institute have been established in Leningrad, Tomsk, Yerevan, Frunze, Iskra, and Kudinovo. Between 1950 and 1955 he held the elective office of Vice President of the Armenian Academy of Sciences, and since 1955 he has been Editor-in-Chief of the journal Elektrotehnika (Electrical Engineering). He is also the bearer of many other honors. Among other things, he was elected delegate to the 22nd Congress of the CPSU. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 09 / SUBM DATE: none

Card 2/2 *Jo*

L 22569-66  
ACC NR: AP6012962 SOURCE CODE: UR/0143/65/000/001/0122/0123 17 23 B

AUTHOR: Atabekov, G. I.; Basharin, A. V.; Bogoroditskiy, N. P.; Bulgakov, K. V.; Vasil'yev, D. V.; Yegiazarov, I. V.; Yermolin, N. P.; Kostenko, M. P.; Matkhanov, P. N.; Novash, V. I.; Norneviskiy, B. I.; Rutskiy, A. I.; Ryzhov, P. I.; Solov'yev, I. I.; Solodovnikov, G. S.; Slepyan, Ya. Yu.; Smurova, N. V.; Tinyakov, N. A.; Fateyev, A. V.; Fedoseyev, A. M.; Shabadash, B. I.; Shchedrin, N. N.

ORG: none

TITLE: Obituary for Ivanov, Viktor Ivanovich

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 1, 1965, 122-123

TOPIC TAGS: academic personnel, electronic personnel, electronics

ABSTRACT: Viktor Ivanovich Ivanov, Dr. of Tech. Sciences, professor of the Leningrad Electrotechnical Institute imeni V. I. Ulyanov, died 24 August 1964. He was born in 1900, was the first teacher of special relay protection of power equipment in the USSR, outlining the principles of the new discipline in a monograph published in 1932. In recent years, Ivanov has concentrated in the development of the teaching of industrial electronics and pulse technology in the Leningrad Institute. [JPRS]

SUB CODE: 09 / SUM DATE: none

Card 1/1 RK



L 02004-67 ENT(1)

ACC NR: AM6023694

Monograph

UR

39

B+1

Kostenko, Mikhail Poliyevktovich; Piotrovskiy, Lyudvik Marianovich

Electrical machines. pt. 2: A. C. machines (Elektricheskiye mashiny. ch. II: Mashiny peremennogo toka) 2d ed. Moscow, Izd-vo "Energiya", 65. 0703 p. illus., biblio., index. Textbook for students at higher technical institutes. 72,000 copies printed.

TOPIC TAGS: electric motor, electric rotating equipment, electric generator, electric transformer

PURPOSE AND COVERAGE: The fundamentals of the theory of dc and ac electrical machines are discussed in the book, the principles of their design are considered, and an analysis of their modes of operation is presented. The first part of the book is devoted to dc machines and transformers, the second part to synchronous machines and asynchronous and collector ac machines. The second edition of the book is supplemented with a number of examples of various types of electric machines and is provided with a bibliography on the most important problems. The book is a general course in electrical machines and is intended for students of power and electrical engineering schools. It can also be useful for electrical engineers working in the fields of the theory, research, production, and maintenance of electrical machines.

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UDC: 621.312/.313

L 02004-67

ACC NR: AM6023694

- Ch. 1 Basic types of ac machines and their design - - 11
- Ch. 2 Electromotive forces in the windings of ac machines - - 39
- Ch. 3 Windings of ac electrical machines - - 56
- Ch. 4 Magnetomotive force of ac windings - - 90
- Ch. 5 Inductive reactances of ac machine windings - - 114
- Ch. 6 Heating and cooling of rotary electrical machines - - 128
- Ch. 7 Heating and cooling of transformers - - 156
- Section 2 Synchronous machines - - 171
- Ch. 8 Armature reaction in a synchronous machine with symmetric loading - - 171
- Ch. 9 Voltage diagrams for three-phase synchronous generators with symmetric loading - - 192
- Ch. 10 A single-phase synchronous generator - - 222
- Ch. 11 Characteristics of a synchronous generator - - 227
- Ch. 12 Parallel operation of synchronous machines - - 240
- Ch. 13 A synchronous motor and synchronous compensator - - 269
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- Ch. 15 Sudden short circuiting of a synchronous machine - - 323
- Ch. 16 Vibrations of synchronous machines - - 365
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- Ch. 18 A three-phase asynchronous machine with a fixed rotor - - 398
- Ch. 19 A three-phase asynchronous machine with a rotary rotor - - 414
- Ch. 20 Torques and rotary power of an asynchronous machine - - 435

Card 2/3

Card 3/3

KUSTENKO, M. S.

USSR/Human and Animal Physiology - Effect of Physical Factors. R-14

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71263

Author : Kostenko, M.S., Neshchadimenko, I.P. Shkapina, B.A.

Inst :

Title : The Influence of Non-Ionizing Radiation on the Catalase and Hematological Indices in the Blood, in Animal and Novocaine Anaesthesia.

Orig Pub : Pub: Zdravookhr. Belorussii, 1956, No 11, 51-52

Abstract : The general clinical picture, activity of catalase and blood morphology of irradiated animals, subject to amital or novocaine anesthesia of the skin, of the back or belly, is the same as in irradiated control animals. In the development of radiation syndrome, at first there occurred changes in the white (reduction of leucocytes began with lymphocytic decrease) and then red bloodcells. The earlier and stronger the leuco-neutro-, lymphocyte-, monocyte-, erythro- and reticulocytopenia, and also the lowering of catalase activity occurred, the larger was the

Card 1/1

- 160 - degree of radiation damage.

Morphology of the blood under X-irradiation in cases of diminished function of the receptors. Vrach.delo no.3:293-294 Mr'58 (MIRA 11:5)

1. Kafedra patofiziologii (zav. - prof. I.P. Neshchadimenko) i kafedra rentgenologii i radiologii (zav. - dots. A.A. Smirnov) Smolenskogo meditsinskogo instituta.

(BLOOD CELLS)

(X RAYS--PHYSIOLOGICAL EFFECT)

(RECEPTORS (PHYSIOLOGY))

40663

27.1220

S/241/62/007/007/006/006  
1015/1215

AUTHOR: Kostenko, M. S.

TITLE: Effect of specific hemolysins on dynamics of phagocytosis in peritoneal exsudate during radiation sickness

PERIODICAL: Meditsinskaya radiologiya, v. 7, no. 7, 1962, 90-92

TEXT: Experiments were carried out on 85 guinea pigs weighing 300-500 g. The phagocytic index was determined by an intraperitoneal introduction of 5 ml of a sterile meat-peptone broth and, 24 hours later, by injection of 1 ml of a 5% suspension of hen's erythrocytes. After 40 min smears from the exsudate were prepared and stained by the Romanovsky-Gimsa method. Five-seven days later the animals were given 250-300 r and 350-400 r doses from a FVC-Co-400-1 (GUS-Co-400-1) unit. The phagocytic activity and phagocytic index were determined 1, 6-7, and 14 days, and 1-2 and 3 months after irradiation. The phagocytic index decreased in both the experimental and control animals but to a far larger extent in the former. Staphylococci reduced the phagocytic index less than did the erythrocytes. This is explained by the production of specific hemolysins to hen's erythrocytes in the guinea pigs, which destroy the RBC before their actual phagocytosis. This hypothesis was examined by the determination of the hemolysin titer in both irradiated and non-irradiated animals, which was 1 : 800 and 1 : 1000 in the former and 1 : 1200 and 1 : 1600 in the latter. A suppression of the hemolysin and antibody production was found in irradiated animals. There is 1 table.

Card 1/1

KOSTENKO, M.S.

Effect of specific hemolysins on the dynamics of phagocytosis in  
peritoneal exudate during radiation sickness. Med.rad. 7 no.7:  
90-92 JI '62. (MIRA 15:11)  
(RADIATION SICKNESS) (PHAGOCYTOSIS)  
(HEMOLYSIS AND HEMOLYSINS)

KOSTENKO, Mikhail Poliyevktovich; GNEDIN, Leonid Pavlovich;  
DEMBO, A.R., otv. red.; KUZ'MINA, M.O., red.izd-va;  
SOROKINA, V.A., tekhn. red.

[Theory and design of three-phase collector machines and  
cascade systems] Teoriia i raschet trekhfaznykh kollektor-  
nykh mashin i kaskadnykh sistem. Moskva, Izd-vo "Nauka,"  
1964. 379 p. (MIRA 17:4)

**SA**

**B69**  
*m*

**PROCESSES AND PROPERTIES MOBI**

**LIGHTNING FLASH TO THE CORE OF THE GUY WIRE SPAN OF AN ELECTRIC TRANSMISSION LINE.** ZALUTS, S. L., AND KOSTOMAROV, M. V. *Akhizirovskoe* (No. 6) 45-51 (1947) In Russian.

Experiment showed that the usual spacings between conductors and guy wires and the height of supporting towers are uneconomical and can be reduced if certain precautions are taken. The line behaves like an insulated conductor in the field between the guy wire and earth. It is shown that the dia. of the line and its distance from the supporting guy wire has little effect on the value of discharge potential in this field. To improve lightning protection, several suggestions are made for optimum dimensions of support towers, lines and guy wires. A. L.

**ABB-SLA METALLURGICAL LITERATURE CLASSIFICATION**

**SOURCE SUMMARY**

**DISTRIBUTION**

**REMARKS**

SA

021.310.93 - 04  
Lightning-protection equipment of h.c. installations.  
KORNEKO, M. V., NAKHATA, V. M., and TROTSKY, V. V.  
U.S.S.R. (No. 2) 44-8 (1948) In Russian.  
The method is based on experimental investigation of critical surge by means of models with lamped par-  
ticles. Laboratory technique is described and illustrated by oscillograms. A. L.

Card. Tech. Sci -  
Dnepropetrovsk Polytech. Inst. in. Kalinin

ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION



KOSTENKO, M. V.

Mar 1948

USSR/Electricity  
Circuits, Equivalent

"Reduction of Complex Circuits to Simplest Equivalent Systems," Prof A. A. Gorev,  
Dr. Tech Sci, docent M. V. Kostenko, Candidate Tech Sci, Leningrad Polytech Inst  
imeni Kalinin, 4 pp

"Elektrichestvo" No 3

Describes transformation of polygon systems into equivalent stars and obtaining  
of formulas for such transformations. Explains transformation of complete  
rectangular network with arbitrary conductance into four-element star, and  
develops formulas to calculate such systems. Describes transformation of  
other complex polygon systems with arbitrary conductance into simple  
equivalent systems.

PA47T23

KOSTENKO, M. V.

Kostenko, M. V. "On the problem of the graphic integration of certain differential equations," Trudy lening. politekhn. in-ta im. Kalinina, 1948, No. 3, p. 67-71.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh 'tately, No. 18, 1949)

KOSTENKO, M. V.

Kostenko, M. V., Messerman, G. T., and Shcherbachev, O. V. "An analyzer for the lightning protective devices of electrical substations," Trudy Leningr. politekhn. in-ta im. Kalinina, 1948, No. 3, p. 141-53, Bibliog: 8 items.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, no. 18 1949).

KOSTENKO, M. V.

D-37 KOSTENKO, M. V. Atmosfernyye perenapryazheniya i grozozashchita vysokovol'tnykh ustanokov (Atmospheric overvoltages and lightning protection of high voltage installations). Moscow, Gosenergoizdat, 1949. 330p. DLC TK31hh.K67; OUMF No. 202-H.

Some of the subjects in this book are: Principles of wave processes in electrical lines, substations, and windings; development of atmospheric overvoltages in high voltage installations; methods of appraising the safety of lightning protection, etc. (The book reflects the status of Soviet theory and of investigations carried out in Soviet laboratories).

KOSTENKO, M. V.

AID P - 602

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 6/35

Authors : ~~Kostenko, M. V.~~, Dr. of Tech. Sci., Polovoy, I. F., Kand. of Tech. Sci., Leningrad Polytechnic Institute im. Kalinin, Sherentsis, A. N., Eng., Teploelektroproyekt

Title : Selection of the surge insulation level of 400-kv apparatus and transformers

Periodical : Elektrichestvo, 8, 31-36, Ag 1954

Abstract : In 1949 the All-Union Electrotechnical Institute im. Lenin (VEI) worked out "Instructions Concerning the Insulation Level for Designing 400-kv AC Installations". The VEI and the Leningrad Polytechnic Institute made special tests on the lightning protection of 400-kv substations. The importance of an uninterrupted operation of these installations was taken into consideration as well as the low probability of surges coming into the substation from the transmission lines with a high-level

KOSTENKO, M. V.

AID P - 3440

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 7/32

Author : Kostenko, M. V., Doc. of Tech. Sci., Prof.

Title : ~~Effect of the earth surface on the mutual impedance~~  
between overhead lines

Periodical : Elektrichestvo, 29-34, 0 1955

Abstract : The author somewhat changes Carson's formulas for mutual impedance of ground return circuits  $Z_{12}$  and obtains approximate expressions. Errors in applying simplified formulas as compared with Carson's series and curves do not exceed 4 to 6%. On the basis of these expressions, the author obtains approximate computing equations for the mutual impedance  $Z_{12}$  between single-wire and the most representative multi-wire transmission lines. For the approximate calculations of communication lines, the author presents simplified formulas for the modulus  $|Z_{12}|$ . The

KOSTENKO, M. V., MIKHAYLOV, M. I., and CHERNYAYEV, I. V.

Disturbing Effect from 3-phase power-transmission lines on telecommunication lines.

paper submitted for presentation at the Intl. Conf. on Large Electric Systems (CIGRE) 17th Biennial Session, Paris, France, 4-14 June 1958.

Electra, No. 30, Nov 57, periodical news letter issued by the CIGRE, Paris

KOSTENKO, M.V.

PHASE I BOOK EXPLOITATION SOV/1130  
Leningrad. Politekhnicheskiy Institut

Tekhnika vysokikh napryazheniy (High-voltage Technique) Moscow,  
Gosenergoizdat, 1958. 664 p. (Series: Its Trudy, No. 195)  
3,000 copies printed.

Eds.: Kostenko, M.V., Doctor of Technical Sciences, Professor;  
Palt, Ye.A.; Tech. Ed.: Voronetskaya, L.V.; Resp. Ed. of  
Series: Smirnov, V.S., Doctor of Technical Sciences, Pro-  
fessor.

PURPOSE: This book is addressed to electrical engineers, spe-  
cifically to those interested in the field of high-voltage  
technique.

COVERAGE: This collection of articles sums up the principal  
results of investigations and studies made by Professor  
A.A. Gorev, Doctor of Technical Sciences, and his staff in the  
field of high-voltage phenomena and techniques at LPI  
(Leningrad Polytechnic Institute). It was at this institute

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High-voltage Technique (Cont.)  
APPROVED FOR RELEASE: 06/14/2000

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that Professor Gorev completed his higher scientific education  
and then taught and carried on his investigations in the field  
until his death in 1953. In 1956, by decree of the Minister  
of Higher Education, the high-voltage laboratory at LPI was  
named after A.A. Gorev. Numerous references appear throughout  
the book.

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SOV/105-58-10-20/28

AUTHOR: Kostenko, M.V., Professor, Doctor of  
Technical Sciences

TITLE: Observations on the "Specifications for the Protection of  
Communications and Signalling Equipment Against the Damaging Action  
of Heavy Current Power Transmission Lines" (Zamechaniya o "Pravilakh  
ograzhdeniya sooruzheniy svyazi i signalizatsii ot vrednogo dey-  
stviya ustanovok sil'nogo toka")

PERIODICAL: Elektrichestvo, 1958, Nr 10, pp 82-86 (USSR)

ABSTRACT: The remarks advanced in this paper may be summarized as follows:  
1) In the specifications (Ref 1) a voltage of 500 V is declared  
permissible if no individual protective measures are provided for  
the linemen working on reinforced-concrete poles and wood poles.  
This limitation is in no way justified. 2) Nothing is found in the  
specifications on the possibility of the generation of voltage be-  
tween the conductors of communication lines. These voltages (250 -  
310 V) may prove to be insufficient for igniting the lightning  
arresters (Ref 3) and at the same time dangerous to a lineman. The  
installation of lightning arresters increases the probability of  
the occurrence of such voltages. 3) In order to be able to comply  
with the requirements set forth in the specifications, a great

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Observations on the "Specifications for the Protection of Communications and Signalling Equipment Against the Damaging Action of Heavy Current Power Transmission Lines" SOV/105-58-10-20/28

number of lightning arresters with a small ground resistance must be installed. This feat, however, is mostly very difficult to achieve owing to grounds of a technical and economical nature, and owing to safety and reliability considerations. 4) An analysis of the maximum overvoltages occurring in communication lines incorporating lightning arresters of a general type, and the numerical interpretation of a case, which actually happened, demonstrated that the formulae and recommendations included in the specifications, in particular for multi-wire conductors, do not even guarantee a voltage not in excess of 500 V. 6) The paragraphs of the specifications concerning the protection of communication lines from dangerous influences of power lines are due to be drastically revisioned. There are 3 figures and 3 references, which are Soviet.

ASSOCIATION: Leningradskiy politekhnicheskii institut imeni Kalinina  
(Leningrad Polytechnical Institute imeni Kalinin)

Card 2/2

KOSTENKO, M.V., prof., doktor tekhn.nauk; POLOVOY, I.F., kand.tekhn.nauk;  
PRCHENKIN, I.D., inzh.

Lightning protection of substations on spur lines. Izv.vys.ucheb.zav.;  
energ. 2 no.10:1-7 0 '59. (MIRA 13:3)

1. Leningradskiy politekhnicheskoy institut imeni M.I. Kalinina.  
Predstavlena kafedroy tekhniki vysokogo napryazheniya.  
(Lightning protection) (Electric substations)

8(3)

SOV/105-59-8-1/28

AUTHOR:

Kostenko, M. V., Professor, Doctor of Technical Sciences

TITLE:

Propagation of Sinusoidal Oscillations Along a Three-conductor Transmission Line With Conductors Arranged Horizontally

PERIODICAL: Elektrichestvo, 1959, Nr 8, pp 1 - 8 (USSR)

ABSTRACT:

This is an attempt to generalize the method of reference 2 of determining the propagation constants for a single-conductor line to a three-conductor line, using also error estimates from reference 2. The assumptions are: The conductors are cylindrical and run parallel to ground and parallel between themselves. The basic constants of the conductors are also invariable. No account is taken of leakage currents across the insulators. The current distribution in each conductor is axially symmetrical. By solving Maxwell's equations this method can be applied to the analysis of wave processes in n-conductor lines with different conductor diameters and different to-ground distances. The wave-channels and the propagation constants of a three-conductor line are investigated and formulas are derived specifying the currents and

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the propagation constants in these channels. In the sequel the wave resistances and the voltages on the lines are investigated. It is shown that for a three-conductor line there exist 6 linearly independent solutions. Every one satisfies Maxwell's equations and all boundary conditions at the interfaces conductor-air and air-ground. Every solution possesses its own propagation constant and a definite ratio between the corresponding current- and voltage components at the conductors of this line. Control calculations also showed that each of these solutions identically satisfies the telegraph equations for three-conductor lines with a horizontal arrangement of the wires. Hence the totality of these linearly independent particular solutions are simultaneously the general solution of the telegraph equations. The boundary conditions at the input and the delivery end of the line are investigated and formulas expressing them are written down. Finally, the influence of a transposition of the conductors of a line is investigated. The present article is the first attempt at investigating the wave propagation process along a multi-conductor line by solving the electromagnetic field

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equations without making recourse to the equations of equivalent circuit diagrams. The estimates presented show that if waves propagate in an unsymmetrical wave channel (O-channel) the errors will not exceed 10%, provided that

$\omega \epsilon_3 \ll 10^9$  ohm.m/sec. It is emphasized that these results must be better defined, in particular for waves propagating in symmetrical channels (a-channel and c-channel). There are 6 figures, 1 table, and 5 references, 3 of which are Soviet.

ASSOCIATION: Leningradskiy politekhnicheskii institut im. Kalinina (Leningrad Polytechnic Institute imeni Kalinin)

SUBMITTED: January 9, 1959

Card 3/3

IVANITSKAYA, O.N., inzh.; KOSTENKO, M.V., prof., doktor tekhn.nauk;  
YURINOV, V.M., dotsent, kand.tekhn.nauk

Consideration of the end effect near the point of short circuit in connection with the calculation of the dangerous influence of electric transmission lines on communication lines.  
Izv.vys.ucheb.zav.: energ. 3 no.5:26-34 My '60.  
(MIRA 13:6)

1. Leningradskiy politekhnicheskoy institut imeni M.I.Kalinina.  
Predstavlena kafedroy tekhniki vysokikh napryazheniy.  
(Electric lines--Overhead)

20306  
S/143/60/000/010/001/011  
A189/A026

9.1300 (and 2303)

AUTHOR: Kostenko, M. V., Doctor of Technical Sciences, Professor

TITLE: Propagation of the sinusoidal electromagnetic waves along  
a symmetric line

PERIODICAL: Energetika, no. 10, 1960, 1-13

TEXT: The paper discusses the propagation of sinusoidal electromagnetic waves along a symmetric line containing n-conductors. The purpose is to derive a set of equations for the practical engineering calculations of the wave processes along the n-conductor line. The existing approximation methods do not include the influence of the specific earth resistance and individual line characteristics and thus, in some cases, lead to considerable errors. Based on the theoretical analysis of a multiconductor line without losses and a three-conductor line with losses the author divides all wave ducts of a multiconductor line into two groups: 1) an asymmetric duct (O-duct) and 2) all the remaining symmetric ducts (S-duct). He analyzes both groups and derives calculation formulas for propagation constants of these ducts, their wave impedances, the relations between the currents in

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Propagation of the sinusoidal...

the conductors, and formulas to satisfy the limit conditions at the beginning and the end of the line. The average influence of earth losses for the O- and S-ducts are calculated according to formulas and curves submitted by J. Carson, without taking into account the mutual and relative-to-earth asymmetry of the conductors. Based on the practical calculations, the author concludes that S-duct attenuation is by one order lower than that for O-ducts for lines of higher voltage classes. To facilitate the engineering calculations, it is necessary to compile auxiliary curves or tables for the determination of differences between Carson functions at different relations between conductor heights, distances between them, frequency, and specific earth resistance. Engineering calculation formulas for inherent and mutual impedances, conductances, propagation constants, impedances introduced by the earth into the O- and S-ducts, and the wave impedances are given in 6 appendices to the paper. There are 9 references: 7 Soviet and 2 English.

ASSOCIATION: Leningradskiy politekhnicheskii institut imeni M. I. Kalinina  
(Leningrad Polytechnic im. M. I. Kalinin)

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S/143/60/000/010/001/011  
A189/A026

PRESENTED: Kafedra tekhniki vysokikh napryazheniy (Department of High-Voltage Engineering)

SUBMITTED: May 9, 1960.

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9.1400

84358  
S/105/60/000/011/001/008  
B012/B058

AUTHOR: Kostenko, M. V., Doctor of Technical Sciences, Professor  
TITLE: Propagation of Electromagnetic Waves<sup>21</sup> Along Multiconductor  
Lines

PERIODICAL: Elektrichestvo, 1960, No. 11, pp. 8 - 12

TEXT: A line with  $n$  conductors and constant parameters ( $\mu = \text{const}$ ,  $\epsilon = \text{const}$ ,  $q = \text{const}$ , no corona) is investigated for every medium (air, conductor, ground). It is pointed out that it is very difficult to solve accurately the problem of the propagation of electromagnetic waves along multiconductor or even single conductor lines (Ref. 1). The following factors are therefore neglected: the "end effect" along the line, the "wave effect" transversal to the line, the "proximity effect", the discontinuities of the line, the longitudinal components of the displacement currents in the air, the transverse component of the electric field strength in the ground and in the lines. The wave processes occurring in a line with  $n$  conductors are thus expressed in first approximation by the telegraphic equations (1) and (2). Expressions for the conductor

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Propagation of Electromagnetic Waves Along  
Multiconductor Lines

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currents and their voltages to the ground are obtained as a solution of the telegraphic equations. As could be seen from numerical computations of real lines, the current ratios

$\delta_{ks} = \frac{I_{ks}}{I_{1s}}$  are practically real and change only slightly as to their

absolute value. The conductor voltages to the ground are expressed by the sum of particular solutions: formula (13). It is shown that neither  $\delta_{ks}$  nor the wave impedances  $w_{ks}$  (k-th conductor in the s-th wave channel) in first approximation depend on the operator  $p$  and  $j\omega$ , respectively. Formula (16) is written down for the instantaneous value of the electromagnetic power transmitted along the line (Ref. 5). Formula (18) is the sum of  $P_s$  and  $P_{rs}$ .  $P_s$  is the electromagnetic power transmitted in the s-th channel of the line with  $n$  conductors by the wave with the propagation factor  $\gamma_s$ .  $P_{rs}$  is the electromagnetic power generated by the interaction between the electromagnetic fields of the r-th and s-th channel with the propagation factors  $\gamma_s$  and  $\gamma_r$ , respectively. Formula (21) for  $P_{rs}$  is obtained in consideration of the above remarks

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KOSTENKO, M.V.; POLOVOY, I.F.; ROSENFEL'D, A.N.

Effect of lightning strokes which have bypassed the grounding wires on high-voltage power transmission lines. Elektrichestvo no.4:20-26 Ap '61. (MIRA 14:8)

1. Leningradskiy politekhnicheskiy institut imeni Kalinina,  
(Electric lines—Overhead)  
(Lightning protection)

KOSTENKO, M.V.; SIDEL'NIKOV, V.V.; ORLOV, V.N.

Parameters of high-frequency communication channels using overhead  
and cable electric power transmission lines. Sbor. rab. po vop.  
elektromekh. no.5:240-251 '61. (MIRA 14:6)

(Telephones lines)

(Radio lines)

(Telegraph lines)

KOSTENKO, M.V.

Deformation waves in a multiconductor line due to the resistance of the conductors and the earth. Elektrichestvo no.6:5-10 Je '61.

(MIRA 14:10)

1. Leningradskiy politekhnicheskii institut imeni Kalinina.  
(Electric lines) (Transients (Electricity))

KOSTENKO, M.V., doktor tekhn.nauk, prof.

"Atmospheric overvoltages in electric power transmission lines.  
Elektrichestvo no.8:91-92 Ag '61. Reviewed by M.V. Kostenko.  
(Electric lines—Overhead)  
(Electric protection)  
(Rasevig, D.V.)



KOSTENKO, M.V., doktor tekhn.nauk, prof.

Problem concerning super-high voltages. Izv. vys. ucheb. zav.;  
energ. 4 no.10:4-11 0 '61. (MIRA 14:11)

1. Leningradskiy politekhnicheskoy institut imeni M.I.Kalinina.  
Predstavlena kafedroy tekhniki vysokikh napryazheniy.  
(Electric power distribution--High tension)  
(Electric switchgear) (Electric protection)

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Nikolai Pavlovich Vinogradov; obituary. Elektrichestvo no.10:  
91-92 0 '61. (MIRA 14:10)  
(Vinogradov, Nikolai Pavlovich, 1886-1961)

KOSTENKO, M.V.; NEYMAN, L.R.; MELENT'YEV, L.A.; KAMENSKIY, M.D.; BOLOTOV,  
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DUBINSKIY, L.A.

B.L.Aizenberg; on his 60th birthday. Elektrichestvo no.11:94  
N '62. (MIRA 15:11)  
(Aizenberg, Boris L'vovich, 1902-)

ALEKSANDROV, G.M. (Leningrad); KOSTENKO, M.V. (Leningrad); POLOVOY, I.P.  
(Leningrad)

Problem concerning the prospective voltage step-up of overhead  
electric power transmission lines. Elektrichestvo no.11:20-25  
N '62. (MIRA 15:11)

1. Chlen-korrespondent AN SSSR (for Kostenko).  
(Electric lines--Overhead) (Electric power distribution)